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JFACC AFLOAT

by

ORREN R. CROUCH
Captain, USN

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature 
17 May 1993

Paper directed by
Captain H. Ward Clark, USN
Chairman, Department of Operations
Captain R. H. Hartman, USN
Captain D. H. Estes, USN
Colonel P. E. Nell, USA

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ABSTRACT of **JFACC AFLOAT**

The Navy's new white paper, "*From the Sea*," stresses that power projection from the sea in the littoral environment is a primary mission for Naval forces. Given a major regional contingency operation requiring forced entry or control of littoral waters, where host nation land bases are not available, the CJTF and his JFACC could be required to operate from a Navy platform (CV, Amphibious or LCC ship). The Navy must be capable of executing the CJTF and JFACC missions or hosting the CJTF and JFACC staffs aboard ship.

This paper will attempt to show that the concept of basing the JFACC afloat is feasible and sometimes desirable, but there are advantages and disadvantages.

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TABLE OF CONTENTS

CHAPTER	PAGE
ABSTRACT	ii
I INTRODUCTION.....	1
II WHERE SHOULD THE JFACC BE BASED.....	3
JFACC Responsibilities	
Berthing	
Aircraft Carrier (CV)	
Amphibious Ship	
Command and Control Ship (LCC)	
III SIZE AND TRAINING OF THE CJTF AND JFACC STAFFS.....	6
Office and Work Space	
Training	
IV CONNECTIVITY.....	9
Integrated Battle Management System	
Data Link Architecture	
Common Mission Planning System	
MILSTAR and SATCOMs	
Common Aviation Radios	
V BREAK POINT FOR JFACC AFLOAT OPERATIONS.....	14
Wargame 2001	
VI CONCLUSION.....	15
NOTES.....	18
BIBLIOGRAPHY.....	20

JFACC AFLOAT

CHAPTER I

INTRODUCTION

The Navy's new white paper, "*From the Sea*," stresses that power projection from the sea in the littoral warfare arena is a primary mission for Naval forces. Given a major regional contingency scenario requiring forced entry or control of littoral waters, such as the Straits of Hormuz, where host nation land bases are not available, the Regional CINC could easily assign command of a Joint Task Force (CJTF) to a Naval Commander. Historical examples of this include Admiral Metcalf, Commander Second Fleet's assignment of the Grenada invasion and Admiral Kelso, Commander Sixth Fleet's assignment of the EL DORADO CANYON Libya strike. The CJTF in neither of these scenarios officially designated a Joint Forces Air Component Commander (JFACC), but the required coordination for inter-service air strike planning was effectively handled by the individual service representatives on the CJTF staffs. I am not suggesting that a Naval Commander should always be assigned as the CJTF if the contingency operation starts from the sea, but only that the CJTF and, if possible, his JFACC staff be positioned where the majority of his assets are located. If a Naval Commander or any other service (regardless of who) commander is assigned as the CJTF, the Navy must be ready and able to support the JFACC mission from a platform afloat. If the operation ultimately includes an invasion (Amphibious or Air), the CJTF could be a Marine or an Army Commander who may be best positioned on the Amphibious Ship and then shift his operations ashore when host nation or US controlled bases are available. The scenario could also start with a CJTF

afloat and then command of the operation assumed by the Regional CINC himself (as in DESERT SHIELD/DESERT STORM).

Lessons learned from past joint contingency operations, recent joint exercises (OCEAN VENTURE 92 and TANDEM THRUST 92) and studies (Wargame 2001) have generated much discussion and focused interest on the subject of basing joint staffs aboard ship. OCEAN VENTURE 92 and TANDEM THRUST 92 demonstrated many of the present difficulties associated with coordination and communications with shore based joint service commanders. Wargame 2001 focused on the year 2001 and projected forces and technical advances postulated for the near future. However, many of the same problems associated with afloat basing still surfaced as unsolved questions concerning available afloat real estate, communications, equipment, complexity of operations and joint staff training.

This paper will attempt to show that the concept of basing the JFACC afloat is feasible and sometimes desirable, but there are advantages and disadvantages that must be exploited or worked around as required. Keeping things compact, simple, streamlined and high tech are the keys to making the afloat JFACC scenario function adequately.

CHAPTER II

WHERE SHOULD THE JFACC BE BASED

The discussion of where to base the JFACC Staff has two parts--first, what tasks is he responsible for and--second, how much space he will require to carry out the JFACC mission.

JCS Pub 1-02, the DOD Dictionary of Military Terms outlines the basic responsibilities of the JFACC as follows:

"The Joint Forces Air Component Commander derives his authority from the Joint Force Commander who has the authority to exercise operational control, assign missions, direct coordination among his subordinate commanders, redirect and direct his forces to ensure unity of effort in the accomplishment of his overall mission. The Joint Force Commander will normally designate a Joint Force Air Component Commander. The Joint Force Air Component Commander's responsibilities will be assigned by the Joint Force Commander (normally these would include, but not limited to, planning, coordination, allocation and tasking based on the Joint Force Commander's apportionment decision). Using the Joint Force Commander's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the Joint Forces Air Component Commander will recommend to the Joint Force Commander apportionment of air sorties to various missions or geographic areas.¹

The most important things to take from this explanation of the JFACC role in Joint Warfare are first, that the JFACC derives his authority from the CJTF, indicating that his authority is not an absolute. Second, the word "normally" is used throughout the description indicating that JFACC is meant to be a flexible concept to be used by the CJTF as the situation warrants. Third, coordination by the JFACC is the key to the CJTF's ability to ensure unity of effort to accomplish the air mission.² Lastly, it is the CJTF's responsibility to provide guidance to the JFACC about structure and location of his staff and what particular functions he will perform to accomplish a coordinated air effort.

I think that the JFACC's responsibilities in the afloat scenario should be limited to targeting, bomb damage assessment (BDA) and coordinating the Air Tasking Order (ATO). The other traditional missions assigned to the JFACC during DESERT STORM (air space control and air defense) will be handled by other naval warfare commanders or US Marine Amphibious Units until the JFACC is re-established ashore.

The second part of the JFACC basing question deals with space aboard ships. Real estate aboard naval ships has always been a problem. As the complexities of naval operations rise, especially tactical air operations, there is also a rise in requirements for trained personnel to operate and repair this sophisticated equipment. The increased personnel requirement has stretched available berthing space to the limit.

The Aircraft Carrier (CV) has a complement of approximately 5500 personnel aboard (3000-3500 ship/Battle Group Staff and 2000 Air Wing). On USS Forrestal's 1991 Mediterranean Cruise, there were only about 100 extra enlisted racks and 25-30 officer stateroom beds available for temporary personnel. Vice Admiral Owens (N-8), in a recent visit to the Naval War College, indicated that during USS Saratoga's 1992 Cruise, a Turkish Army General and his staff of 75 people and three other staffs operated aboard for a two week Display Determination 1992 (DD-92) exercise. To make that work, some people had to leave the ship. For short periods of time, some non-critical personnel can be moved ashore or distributed to other ships in the fleet. Occasionally a detachment of aircraft and maintenance personnel can be flown to a friendly base some distance from the conflict to make additional space available. The key is that "some people" is not many, so staffs that come aboard will be a lot slimmer than the usual USAF JFACC staff. For example, during DESERT STORM, the JFACC staff numbered nearly 1000 and in Somalia the JFACC staff was over 200 personnel (stationed in Germany).³ No, naval combat ship can accommodate a staff complement that large. Only the critical core (100 at most) of highly trained versatile staff members can feasibly be embarked on Navy CVs as they are presently configured. The new USCINCLANT/USCINCPAC JFACC concept of operations

warfighting document, J311/3000 of 07 January 1993, designates 68 nucleus manning billets plus additional personnel as required.⁴

The Amphibious ships also have only limited facilities for a small staff. If the contingency operation is an amphibious landing and supports a beach head (as it was in Grenada), the CJTF and his JFACC staff may be best placed on the amphibious ship. All the same real estate problems apply to the Amphibious ship as it does to a CV.

Command and Control (LCC) ships are the best answer to the afloat basing question. The Navy needs an LCC ship built from the keel-up to house a CJTF staff and associated JFACC and Joint Intelligence Center (JIC) staff functions. Since money is not in the budget for that kind of ship anytime soon, our best hope lies in upgrading the current Commander Second Fleet and Commander Seventh Fleet LCC platforms.⁵ Although we can enhance the communications suite on these LCC platforms, we can't increase the billeting for large staffs.

CHAPTER III

SIZE AND TRAINING OF THE CJTF AND JFACC STAFFS

Berthing is not the only problem with the size of staffs aboard ship. Working space is also at a premium. Every inch of space aboard ship is used for something. Even ladder well landings and void spaces are sometimes turned into office and work spaces. Room for increased computers, desk space, communication stations, displays and planning spaces for a new staff (besides the Battle Group staff) are hard to generate. The Navy may have to look at re-locating the Battle Group staff to a cruiser instead of the carrier, merging the two staffs or replacing the Battle Group staff with the CJTF staff (if it's a Naval oriented staff).

The CV has its own Intelligence Center called CVIC. Adequate intelligence communications and imagery reception capabilities (including Fleet Imagery Support Terminal (FIST), Tactical Receive Equipment (TRE), Threat research and analysis program (TRAP), Tributary (TRIB) and Joint Deployable Intelligence Support System (JDISS)) exists on every CV. However, CVIC is not oriented or staffed for JFACC targeting or CJTF support. An augmentation to the CVIC staff of Joint Intelligence Center (JIC) Detachment (DET) personnel could solve that problem. USCINCPAC recently established a program to augment the CJTF staff with approximately 12 JIC DET personnel to support contingency operations.

To contend with afloat based joint operations, staffs (especially naval staffs) must train specifically for CJTF, JFACC and JIC contingencies. During OCEAN VENTURE 92, training for naval staff members, in joint doctrine and planning was inadequate.⁶ Over the years the naval tactical aviation gradually developed as a stand-alone organization. The Navy always augmented other operations, but seldom trained with other services. Even though our participation in world wide Joint Exercises has increased, we have not integrated much joint training into the Carrier Air Wing's work-up cycle. The Air Wing's NAS Fallon advanced power

projection training (as close to combat as we can come) has always been based on the assets of a single Carrier Air Wing to execute all strike planning and tasking. Except for KC-135 tanking and long range strikes to USAF and Army controlled targets, little joint service training was incorporated into an Air Wing's training cycle. The Navy has little experience with Operational Art and the operational level of war. As a result, all Navy target planning has been accomplished by squadron aviators at the tactical level with little joint or operational level influence on the planning process. Historically, JFACC has directed targeting, sortie generation (through the ATO and BDA) at the operational level using USAF doctrine. Consequently, it is not consistent with the Navy's way of doing things. We may need to "re-invent the wheel," or at least re-align it, to bring the joint planning process into the Navy's thinking and train more to function as a joint staff. One area to start with is using the pool of outstanding junior tactical planners from Air Wing Squadrons to augment a small core of JFACC staff members when the JFACC staff is positioned afloat. The training should start early in the work-up cycle and be tested during the Air Wing's NAS Fallon strike training detachment. However, the easiest answer from the navy's standpoint is to limit the responsibilities of the JFACC afloat to writing the ATO and leave target planning at the tactical level.

The Navy's standard way of doing things is changing daily. Admiral Paul D. Miller's efforts as CINCLANT to improve training and focus on Joint development is refreshing. He established the Afloat Training Organization to standardize all fleet basic training. He is also working to standardize Atlantic and Pacific Fleet procedures and training. His best contribution to the joint arena was the realignment of the turnaround training cycle for all Fleet Units and Air Wings.

NAVY NEW FLEET TURNAROUND CYCLE

REFIT	* READY FLEET	DEPLOYMENT
Basic Training	Intermediate Advance Training Warfare Training	CINC Scheduled Joint/ Combined Operations
Phased Maintenance for Ships/Aircraft	Chop to 2nd/3rd Fleet CINCPAC/CINCLANT	Chop to Supported CINC

*** Ready Fleet status starts six months before deployment.**

Now greater emphasis can be placed on Navy CVBGs and other supporting units to infuse joint training and exercises into the Ready Fleet and Deployment phases.⁷

Another issue affecting the size of the JFACC staff (see Chapter II) is the actual functions for which the staff will be responsible. During DESERT SHIELD/DESERT STORM, the JFACC had the responsibility for airspace control and air defense as well as targeting, BDA and generation of the ATO. When based afloat, the JFACC should only be concerned with targeting, BDA and the ATO. Air defense and air control will be handled by the Navy Anti-Air Warfare (AAW) Commander (usually aboard an Aegis Cruiser, but can be the CV) and U S Marine tactical units to integrate Battle Space Management. The Navy Tactical Control System (NTDS LINK-11) interfaced with the USAF Airborne Warning and Control System (AWACS) gives the CJTF and the AAW Commander an acceptable real-time air and sea picture. The Marine Tactical Control Centers can feed LINK-11 data from the Amphibious Operating Area (AOA). However, Army land campaign data is not compatible until the Joint Tactical Information Distribution System (JTIDS) comes on-line (see Chapter VI). When JTIDS becomes available, all service's tactical data can be exchanged giving the CJTF the same common battle management picture no matter where he is based (ship/shore). The afloat JFACC staff would act more as a "fusion center" supported by JIC DET augmented personnel working with the CV's CVIC personnel and equipment. The fusion center would evaluate the Enemy Order of Battle threat and BDA, develop a master target list, generate sortie and re-strike requirements and publish the ATO to execute the Air Campaign.

CHAPTER IV

CONNECTIVITY

The biggest gap between requirements and capabilities to operate the JFACC from a ship is in the Navy's ability to communicate with other services and the volume of data that must be transmitted through very limited satellite assets. The overall goal would be to ensure that all commanders, especially the CJTF, have a common tactical picture. This would allow the CJTF and his JFACC to operate from the sea and then smoothly transition to shore basing, as the operations became more complex, with little loss of continuity.

Three components must be present to meet requirements of a common tactical picture. First is an Integrated Battle Management System.⁸ The Navy's NTDS system (LINK 11) is compatible with the USAF AWACS and USMC Tactical Command Centers, but not with Army units.

The second component is data link architecture.⁹ Achieving a common Battle Management system is crucial to integrating all forces for joint operations. One system on the horizon to obtain this inter-operability is the Joint Tactical Information Distribution System (JTIDS).¹⁰ JTIDS has two basic classes with several variants of the smaller class 2 mode. The class 1 systems are deployed in USAF AWACS aircraft. The smaller class 2 systems were designed for tactical aircraft. The system provides two-way data link between airborne radar assets like AWACS/ E-2, tactical aircraft, Navy ships and Army ground units. NATO also got into the game by developing a lower cost Multi-functional Information Distribution System (MIDS) that is compatible with the JTIDS system.¹¹ The MIDS system is planned for installation in Navy FA-18 and other NATO fighter aircraft. The first tri-service test of JTIDS was conducted in 1991. The evaluation linked 6 USAF, Navy and Boeing aircraft, a Navy cruiser, 2 ship

simulators and 2 Army ground terminals.¹² The initial and follow-on trials validated successful JTIDS system operation, but so far only one-way transmission from the airborne AWACS is functional. In the very near future the system should be fully operational and provide two-way communications between all US forces and some NATO allied units. The Navy's Joint Over-the-Horizon Targeting System (JOTS II) has an automatic feed from LINK-11 and manual inputs from other units (even Army during TANDEM THRUST 92) that can provide the CJTF an excellent (not quite real-time) operational level battle management tool. When JTIDS is introduced, it will also provide an automatic LINK-11 feed of all friendly and threat air/sea/land force data to the JOTS II display.

The third building block in the JFACC afloat plan is the requirement for a common mission planning system. If the JFACC planners are to smoothly transition operations from afloat to ashore, we (meaning all services doing target planning) must have common equipment with which to work. The newest system on line is the computerized Advanced Planning System (APS) developed by the USAF Rome Laboratory. This system is being used by the JFACC in Ramstein Germany to plan all aspects of the "No Fly" Zone and Humanitarian Airdrops in Bosnia. It also produces the ATO. The Ramstein APS system has six stations that allow for the individual planning of various functions (fighter, strike, airlift, etc.) concurrently, each sharing the data as it is developed. The system quickly identifies any shortfall in resources to the JFACC/CJTF. Two significant advantages of the APS are--first, one half the normal manning is required to staff the JFACC and--second, the JFACC planners can produce a lengthy ATO in far less time. After the ATO is developed, it can be electronically transferred to the standard military message system. Some Navy personnel have been trained to use the system and future training is planned for NATO staff planners.¹³

From a connectivity standpoint, ships at sea require high capacity multi-media communications links. The first and most important requirement is an Extremely High Frequency Military Strategic Tactical and Relay Satellite System (EHF/MILSTAR) on command and control platforms. This includes any ship where the CJTF, JFACC and JIC staffs

may be based. This requirement will entail significant upgrades in current CV, Amphibious and LCC electronic/communications suites. MILSTAR is the last of the huge satellite projects on the drawing board. It is a 10 year multi-billion dollar program composed of a constellation of virtually un-jammable communications satellites.¹⁴ MILSTAR is the cornerstone of our satellite communications network for the late 90's and beyond. The system provides increased EHF and UHF capabilities. The first MILSTAR satellite is scheduled for delivery in late 1993.¹⁵ This first MILSTAR system will consist of satellites, ground based control stations and various USAF, Army and Navy terminals.¹⁶ The system will facilitate the rapid transmission of tactical information including imagery, maps and other warfare data. The system is programmed for completion by 1997. The 8th MILSTAR will be the first production satellite and follow-on MILSTAR satellites are upgrades to the earlier MILSTAR system. The 8th MILSTAR is scheduled for launch in 2005.¹⁷

Another requirement for connectivity is to increase Demand Assigned Multiple Access (DAMA), Super-High Frequency (SHF) and Ultra-High Frequency (UHF) Satellite Communications on all Navy surface platforms. This is not an easy or inexpensive task. Satellite tracking from a moving platform like a ship, especially a carrier that has to turn into the wind to launch and recover aircraft every couple of hours, presents a problem for maintaining continuous satellite contact. Navy ships in general have few SHF/EHF capabilities. In 1991 on USS Forrestal's last Mediterranean cruise, the communications suite had very few satellite channels and only one commercial International Marine Satellite (INMARSAT) telephone line. The current Carrier (USS Theodore Roosevelt) deployed to the Mediterranean may have a few more SATCOM channels, but not many more. The near future does look brighter for Navy communications. By mid 1993 the Navy will launch its first UHF follow-on communications satellite, the enhancement to the Fleet Satellite Communications System (FLTSATCOM).¹⁸ The complete constellation will consist of 9 Hughes HS-601 satellites. Each satellite will be equipped with 39 UHF channels, 11 EHF channels and a steerable 5 spot beam that will be

compatible with the MILSTAR system.¹⁹ The increased SATCOM channels will allow the Navy to implement the JFACC afloat mission more effectively.

The final inter-operable communications system that is so critical for Joint operations is compatible tactical radios. This requirement does not have an immediate impact on the JFACC operation afloat, but as the JFACC moves ashore and takes on the task of an airborne coordination center, it will. The Airborne Multi-Mode Secure UHF/VHF Transceiver (ARC-210) advanced aviation radio is an example of a future inter-service capable system.²⁰ For years, the tactical naval aviation community requested the USAF "Have Quick" frequency switching non-jammable system, but were told that it was not feasible because funding was not available to upgrade the entire aviation community's radio suite. However, common sense would dictate that if we are going to work together, we must be able to talk to each other. Money spent on a common radio system earlier would have certainly alleviated some of our present joint operations growing pains.

How does the upgrade of tactical communications effect the JFACC mission afloat? Its greatest impact is in the ability to function in a timely (close too real-time) manner to coordinate the requirements of target planning, ATO, mission de-confliction and BDA. If the JFACC is to operate from a one single point afloat and is responsible for all the above listed functions, he must be able to communicate promptly with other service units. During DESERT STORM and even during Operation PROVIDE COMFORT after the war, the Navy's hard copy message system was so cumbersome that the ATO would arrive aboard ship after the strikes were scheduled to launch. The Navy lacked compatible USAF Computer Assigned Force Management System (CAFMS) equipment.²¹ A small number of CAFM units were made available to the Navy after the war, but the system could only review the ATO--it could not make changes to the ATO. The ultimate fix during the war was to fly an aircraft to the beach and hand carry the ATO back to the ship to give air crews time to plan the missions. Now, just imagine trying to get the ATO off a ship to all the other players in a joint operation. We must increase the data transmission rates (BAUD) and compatible SHF/EHF satellite communication

suites aboard Navy Command and Control platforms if we want an afloat JFACC to be successful. The universal acceptance of a common mission planning system like APS could greatly enhance the JFACC afloat ability to generate a timely ATO message to all the players. Wargame 2001 also indicated that until the Navy's new upgraded connectivity systems are in place, the Fleet Mobile Operations Command Center (FMOCC) remained a valid requirement for afloat staff communications.²² The FMOCC can help for a small scale contingency, but is not adequate to handle large complex JFACC operations.

CHAPTER V

BREAK POINT FOR JFACC AFLOAT OPERATIONS

Operation TANDEM THRUST 92 indicated that 250 sorties was about the maximum number of sorties that a single CV/CARGRU staff could schedule.²³ Wargame 2001, the most recent study that tried to deal with the problem of basing the JFACC afloat, indicated that the volume of operations drove the point where JFACC afloat capabilities were saturated (break point). That point was usually somewhere between the 3rd and 4th CVBG (including Tomahawk Land Attack Missile (TLAM) operations). The diversity of operations also played a large role. The break point came even earlier than three CVs if USAF and Army air forces began extensive operations in the theater. The problem could be somewhat alleviated if a true Command and Control platform with upgraded communications was available. By the year 2001, JFACC communications requirements aboard ship will include at least 150 phone lines and a vastly larger "pipe" for data reception and transmission (including video links) than are available today.²⁴ The Navy's current limited communications capabilities restrict the size of a JFACC operation that can be mounted afloat. The size and complexity of a contingency operation could drive the JFACC basing ashore if the operation is more complex than a Non-combat Evacuation Operation (NEO), a no-fly enforcement task, an island invasion, a littoral control mission or the first stages of a forced entry scenario.

CHAPTER VI

CONCLUSION

The Navy must be capable of executing the CJTF and JFACC missions or hosting both the CJTF and JFACC staffs aboard ship, but there are advantages and disadvantages. The greatest advantage is having the CJTF and JFACC in proximity during the operation they are conducting. Much closer coordination of activities is possible when the CJTF, JFACC and JIC are collocated and they are close to the bulk of available operational forces. Even with video and SATCOM links available, the best exchange of ideas and intent are done face-to-face. A personal example of the effects of unity of effort came during the 1991 PROVIDE COMFORT Operation aboard USS Forrestal. Most of The Battle Group's timely decisions were made, or at least started, in the passageway corner between the Flag Chief of Staff's (COS), Flag Operation's, the Admiral's cabin and the Combat spaces. We dubbed the place "decision corner." When things got hot, we all met in the passageway (headed for each other's office) to talk about it. That level of familiarity, shared expertise, and trust cannot be developed over a video or TELCON link.²⁵

Disadvantages include the lack of adequate communications with other service units, the size of the CJTF/JFACC staff (small) that can be physically housed aboard ship and the work load required to effectively manage the JFACC operation. The DESERT STORM JFACC staff contained nearly 1000 personnel that coordinated the air operations of 6 CVBGs and virtually thousands of USAF, USMC, Army and coalition sorties during the war (1000-3000 daily). This scale of operation cannot be executed from a platform afloat with the Navy's current or even near future communications structure. However, a small well-trained JFACC staff can initially be based afloat on a CV, Amphibious or LCC ship for the forced entry phase of a contingency

operation and then smoothly shifted ashore and increased in size as the complexity of operations expanded to a full scale major regional contingency operation. Common equipment, doctrine and training will be the keys to making the transition possible.

An LCC ship built from the keel-up, complete with berthing arrangements and a communication suite capable of handling the operation, is really the best long range solution to the JFACC afloat problem. The best mid-term solution seems to be upgrading our current LCC ships to function as CJTF, JFACC and JIC headquarters afloat. In addition, the communications suites of CVs and large Amphibious ships should be sufficiently upgraded to allow these ships to host a limited CJTF and JFACC staff. During an 11 May 1993 lecture at the Navy War College, General Horner (USAF JFACC for DESERT SHIELD/STORM) indicated that he supported the concept of the Navy functioning as JFACC for an amphibious assault contingency.²⁶

In the past the Navy has chosen not to take-on the job as JFACC or would designate an afloat commander as Deputy JFACC (OCEAN VENTURE 92) for Navy air operations and continue to do their own thing. The Navy would also write the ATO for the Navy and Marine sorties until a real JFACC was established ashore (TANDEM THRUST 92) and then turn the ATO process over to them. That's not really a JFACC afloat. If we truly want to think and operate as a joint force, the CJTF/JFACC must operate as an integral part of the afloat team (with common battle management and mission planning equipment) and then, if necessary, transition ashore and expand the JFACC to meet increased operational requirements.

A recommendation, pointed out by almost every exercise and study conducted on the subject of CJTF and JFACC afloat basing, is training for the staffs. Few joint staffs have an opportunity to participate in the environment at sea for a major exercise before they are called upon to execute the real thing. OCEAN VENTURE 92 was a unique example of a joint operation with multi-based staffs. A Deputy JFACC for naval air operations coordinated with a shore based JFACC staff and the CJTF (Navy) was located ashore, operating from a FMOCC van. The exercise was a test of a Naval commander's ability communicate and smoothly coordinate a large joint exercise, but did not test JFACC afloat. The FMOCC vans proved to be an excellent

communications interface between afloat and shore based units. There were many lessons learned during this exercise, but the greatest shortfall was the need for more in-depth staff training (especially Navy staff members) in the joint operations area.

Being familiar with other service doctrine was also a training issue mentioned by both General Horner and the OCEAN VENTURE 92 debrief. The Navy's new Doctrine Command is currently working to establish and publish doctrine that is in line with joint operations and shifts away from the traditional Naval Warfare Publications (NWP) and Tactical Memorandum management of training and warfare execution. The new joint doctrine should make inter-service training a top issue for future joint exercises and contingency operations.

The bottom line for operating a JFACC from a platform afloat comes down to three things--desire, capability and training. The Navy has the desire to operate in the joint arena and to have CJTF and JFACC staffs based aboard Navy platforms. However, their C⁴ capabilities fall somewhat short of being able to implement a full scale JFACC operation in the USAF style. JFACC afloat operations including NEOs, littoral sea control, or the first stages of a forced entry campaign are well within the Navy's current capability. Commonalty and upgrades in C⁴ equipment destined for the fleet in the next 2-3 years will significantly enhance the Navy's JFACC afloat capabilities. Lastly, training in joint operations, doctrine and planning is the "glue" to pull it all together. The old cliché "we must train in peacetime as we will fight in war" still rings true today.

NOTES

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